

TITLE 326 AIR POLLUTION CONTROL BOARD

#05-23 (APCB)

SUMMARY/RESPONSE TO COMMENTS FROM THE SECOND COMMENT PERIOD

The Indiana Department of Environmental Management (IDEM) requested public comment from December 1, 2005, through January 3, 2006, on IDEM's draft rule language. IDEM received comments from the following parties:

Citizens Thermal Energy (CTE)
Clean Air Strong Economy (CASE) Coalition, submitted by Bingham Mchale (CASE)
GE Plastics, Mt. Vernon, Inc. (GE)
Purdue University (PU)
University of Notre Dame (ND)

Following is a summary of the comments received and IDEM's responses thereto.

Comment: Commenter does not object to the thirty-five (35) day notice requirements in 326 IAC 3-6 instead of the thirty (30) day pre-test notice requirements in the NESHAP. (PU, CTE, ND)

Response: IDEM will include the thirty-five (35) day notice requirements in the proposed rule.

Comment: Commenter supports IDEM's inclusion of emissions averaging provision in the implementation of the NESHAP. (PU, GE, CTE, CASE, ND)

Response: IDEM will include the emissions averaging provision in the proposed rule.

Comment: Commenter appreciates that IDEM is allowing the use of the health-based compliance alternative. This alternative may provide relief to certain sources, especially those who find that the inherent variability of the fuel renders a fuel sampling and analysis program insufficient to demonstrate compliance with the NESHAP. (PU)

Response: IDEM is allowing the use of the health-based compliance alternative as provided in the federal rule.

Comment: IDEM should incorporate the NESHAP for industrial, commercial, and institutional boilers and process heaters by reference without any additional requirements or clarifications. A straight incorporation by reference of this NESHAP is even more appropriate now since U.S. EPA's recent issuance of the Final Rule, Amendments and Notice of Final Action on Reconsideration on December 28, 2005 (70 FR 76918). In addition to the extensive rulemaking process for this NESHAP at the federal level, the reconsideration of this rule

provided even broader participation (including comments submitted by the state) and the opportunity for U.S. EPA to “reconsider” the need for any clarifications or additional requirements. IDEM needs to consider the costs associated with any state-based changes. (CASE)

Response: IDEM is proposing to move forward with a straight incorporation of this NESHAP, including the emissions averaging and test protocol language, in light of U.S. EPA’s recent issuance of the Final Rule, Amendments and Notice of Final Action on Reconsideration on December 28, 2005 (70 FR 76918) (referred to in this response to comments as “reconsideration amendments”).

Comment: IDEM should clarify that the emission rate to be included in the permit for sources choosing the lookup table for the health-based compliance alternative is the emission rate that corresponds to the stack height and distance from the property line for the site in question. Additional clarification is also requested for the specific emissions rates that would be included in the Title V permit for sources using the site specific health-based compliance alternative. (PU, CTE)

Comment: IDEM should include in the source’s Title V permit the process parameters used in the health-based compliance alternative demonstration. The process parameters provides the data needed to set parametric-based emission limits. IDEM can ensure that a source will remain in compliance and eliminate the redundant compliance demonstration of an emission limit for both the source and the state. (ND)

Response: The emission rate to be included in the permit for sources choosing the lookup table for the health-based compliance alternative is the emission rate that corresponds to the stack height and distance from the property line for the site in question. For a site specific demonstration this emission rate would have to be back calculated from a hazard quotient (HQ) of one (1.0) for hydrogen chloride (HCl) and chlorine (CL₂) or manganese, as applicable, using the same assumptions as the risk assessment done for the demonstration. It is important to resolve issues related to integration of the risk based compliance option into the Title V permit, and IDEM will work with sources on these issues. While the process parameters provide the data needed to set parametric-based emissions limits, the emission limit for the health-based compliance standard is not redundant and is comparable to the Subpart DDDDD emission limits in the rule. The health-based emission limit is an alternative limit. The reconsideration amendments amended Appendix A, Section 8(d) to include emission rate as a possible parameter to include in the Title V permit, therefore, IDEM is deleting 326 IAC 20-95-1(c)(7) from the draft rule.

Comment: Given that the health-based compliance demonstrations must be submitted no later than year prior to the compliance date IDEM should develop a compliance schedule that allows ample time for installation of controls for sources whose demonstrations are disapproved by IDEM. (PU, CTE, ND)

Comment: If IDEM properly disapproves a health-based eligibility demonstration, how

quickly will the emission limit, operating limits, and work practice standards of Subpart DDDDD apply? Even if IDEM disapproves a demonstration six (6) months before the compliance deadlines, the facility will not have sufficient time to come into compliance with the Subpart DDDDD requirements. Subpart A of Part 63 does provide for extensions of the compliance deadline, and the commenter believes it would be helpful to acknowledge this in the rule. The language of the rule in 326 IAC 20-95-1(c)(6) should be amended as follows:

“(6) If the department disapproves the health-based eligibility demonstration submitted under 40 CFR 63, Subpart DDDDD, Appendix A, Section 9* and 10*, the facility is subject to the emission limits, operating limit, and work practice standards in 40 CFR 63, Subpart DDDDD*. The facility may, pursuant to 40 CFR 63.6(i), request an extension of the compliance deadline specified in 40 CFR 63.7495.” (GE)

Response: IDEM will work to promptly review the health-based compliance demonstration once it is submitted to the department. U.S. EPA acknowledges in the preamble to the reconsideration amendments that there is some risk involved with electing to comply with the NESHAP via the health-based compliance alternative, including a shorter amount of time to install controls in the event that the source does not submit an eligible health-based demonstration. U.S. EPA also states that they do not endorse the use of CAA Section 112(i)(3)(B) to grant compliance date extensions in these circumstances, however, the decision of whether to grant such a compliance date extension on a site specific basis is left to the permitting authorities. IDEM will consider the use of compliance extensions on a case-by-case basis. The reconsideration amendments amended Appendix A, Section 10(a) to clarify that the eligibility demonstrations may be reviewed by the permitting authority or by U.S. EPA, therefore, IDEM is deleting 326 IAC 20-95-1(c)(6) from the draft rule.

Comment: The federal rule addresses how to deal with a planned change by the facility that may cause the facility’s eligibility demonstration to become invalid. However, neither the federal rule nor IDEM’s draft rule addresses how to deal with the situation where the annual evaluation reveals that the demonstration is no longer valid due to a change external to the facility, e.g., an agency increased the toxicity level of the pollutant of concern, the meteorological data set used in dispersion modeling changed, a new off-site structure was built that changed the results of the dispersion modeling, or a new home or daycare center was built next door to the plant. None of the compliance extension provisions of 40 CFR 63.6(i) appear to be available once ninety (90) days have passed since the compliance deadline. The commenter requests an opportunity to discuss this scenario with IDEM and other interested parties to evaluate how to address such a situation. (GE)

Response: The reconsideration amendments address this situation in Appendix A, Section 11(b). Sources are given three (3) years to comply with Subpart DDDDD requirements for eligibility demonstration updates accounting for an action outside the facilities control when the change causes the source to no longer be able to meet the criteria for the health-based compliance demonstration.

Comment: IDEM's draft rule language provides that the facility must evaluate all parameters used in the health-based compliance demonstration as part of the annual Title V permit compliance certification and certify that "the basis for the health based [sic] compliance demonstration has not changed." This is overly restrictive and the real issue is not whether the basis of the demonstration has changed, but whether the demonstration remains valid. A minor change in one such parameter that formed part of the basis of the demonstration, but which has no significant impact on the basis is immaterial and should not require a negative certification. The language in 326 IAC 20-95-1(c)(7) should be revised as follows:

"(7) Owners and operators shall evaluate all process and non-process related parameters used in the health-based compliance demonstration with each annual Part 70 operating permit compliance certification and certify that the facility remains eligible basis for the health-based compliance alternative demonstration ~~has not changed.~~" (GE)

Response: IDEM agrees that the real issue is not whether a minor parameter has changed, but whether the demonstration remains valid and did not intend to mean otherwise. There is no need to amend 326 IAC 20-95-1(c)(7) as suggested since IDEM is deleting this subdivision from the draft rule. The reconsideration amendments changed Appendix A, Section 11(a) to include parameter changes that could increase risk from exposure to emissions.

Comment: IDEM continues to propose that a site-specific risk assessment consider not only where people currently live, but also where people could reasonably live in the future. The current text of the draft rule would force facilities to either invest significant time and effort in an attempt to make a reasonable guess (one that may ultimately prove incorrect, for which the facility could be penalized) or default to the most conservative basis in order to avoid being second guessed. IDEM's approach is, in essence, revising the federal rule to make it more stringent by changing the individual most exposed from a person in an existing location to one in a speculative location. The commenter requests that IDEM delete 326 IAC 20-95-1(c)(4). (GE)

Comment: Land-use planning is a local government function over which sources have little control, and efforts to anticipate future land use pose particular challenges. Section 6.3.3 - Identification of the Exposure Pathways/Routes (for an inhalation risk assessment) of the Air Toxics Risk Assessment Reference Library states that "...air toxics risk assessments usually presume that the current land use within the area of impact of a source(s) will remain unchanged into the foreseeable future..." The draft language at 326 IAC 20-95-1-(c)(4), requiring sources to make reasonable assumptions about where people live in the future as it relates to inhalation exposure assessments, may be acceptable, but the commenter wishes to continue dialogue with IDEM, as appropriate, to ensure sufficient credence is given to the current land use. U.S. EPA's Risk Assessment Guidance for Superfund (RAGS) allows the determination of future land use to be made using available information and professional judgment, and does allow the status quo. (CTE)

Comment: IDEM's proposed changes to conduct a site-specific compliance demonstration by considering where people could reasonably be expected to live, including

consideration of potential land use changes will create uncertainty, delay and the inevitable diversion of resources that always occurs with such uncertainty and delay with little discernable benefit. (CASE)

Response: IDEM is deleting 326 IAC 95-1(c)(4) since the reconsideration amendments have changed Appendix A, Section 11(a) to include parameter changes that could increase risk from exposure to emissions. The final rule requires that a source complying with the health-based compliance demonstration must resubmit their demonstration of eligibility if process or non-process parameters change in a way that could increase public health risk. This language addresses IDEM's concern about future land use changes thereby eliminating the need for 326 IAC 95-1(c)(4).

Comment: IDEM should consider the use of other equally valid definitions for "maximum exposed individual" and "maximum individual risk" within either U.S. EPA's "Air Toxics Risk Assessment Reference Library" or other valid scientifically-accepted and peer-reviewed facility/source risk assessment definitions. (ND)

Response: The reconsideration amendments further clarified that site-specific compliance demonstrations must indicate that none of the hazard index values for hydrogen chloride (HCl) and chlorine (Cl₂) or hazard quotient for manganese, as applicable, are greater than one (1.0) at "locations where people live or congregate." IDEM is proposing to adopt U.S. EPA's amended language.

Comment: The annual requirement to certify whether any process changes occurred since the last certification was U.S. EPA's acknowledgment that sources had limited, if any, control over surrounding off-site demographics when conducting ongoing site specific risk assessments. Analysis of population changes, if required, should be based upon the most recently available U.S. Census Report and not on predictions upon which sources performing site specific risk assessment have neither control or knowledge. (ND)

Response: U.S. EPA's reconsideration amendments clarify that changes outside of the source's control do need to be considered when certifying annual compliance. The U.S. EPA Air Toxics Risk Assessment Library lists several tools accessible in either hard copy or electronic format to aid in the determination of land use (Land Use Land Cover (LULC) maps, topographical maps, aerial photographs). The reference library also recommends verifying land use areas "on ground" (i.e. verifying visually that none of the hazard index/hazard quotient values are greater than one (1.0) at locations where people live or congregate). Discussions with representatives of private and government organizations which routinely collect and evaluate land use data (e.g. agricultural extension agencies, U.S. Department of Agriculture, natural resource and park agencies, local governments) can also be helpful in updating current land use information and, if desired, getting information on potential future changes in land use. The use of U.S. Census Reports alone may not provide specific enough information for sources to determine the location of where "people live or congregate" for the purposes of a site specific assessment.

Comment: IDEM should reconsider the limitation of Indiana facilities to a single specific risk assessment methodology. The U.S. EPA did not restrict affected sources to use of the specific methodology from the Air Toxics Risk Assessment Reference Library in either the NESHAP for Industrial Boilers , or the Plywood and Composite Wood Products NESHAP. It is unlikely that a source conducting a site-specific risk assessment would submit a demonstration that is not going to withstand the scrutiny of regulatory review considering the risk involved with ensuring compliance. If the draft language at 326 IAC 20-95-1(c)(3) is finalized, IDEM should clearly identify the process an affected source must follow in order to have alternate methodology approved. (CTE)

Comment: IDEM's proposed changes to limit the "scientifically accepted peer-reviewed risk assessment methodology" to the U.S. EPA's "Air Toxics Risk Assessment Reference Library" will result in a significant burden to IDEM and industry, without a commensurate benefit. (CASE)

Comment: IDEM should reconsider the proposal to require the use of U.S. EPA's "Air Toxics Risk Assessment Reference Library" for site specific risk assessments unless other methodologies receive prior IDEM approval. Due to the complexity and uncertainty inherent in site specific risk assessment, U.S. EPA intended that this reference material to be one of many valid site specific assessment tools as demonstrated in the disclaimer in the Technical Resource Document, Section 1.1, "There are multiple ways to conduct a facility/source risk assessment, and the tools and methods described in this document should not be viewed as prescriptive; nor is there a clear hierarchy of tools and methods." The uncertainties in any methodology were determined by many scientifically accepted peer-review years of analysis and thus further analysis to obtain approval for use will not streamline the approval process but will result in multiple meetings with IDEM to obtain a site-specific solution. (ND)

Response: IDEM is deleting 326 IAC 95-1(C)(3) since the reconsideration amendments have changed Appendix A, Section 10(a) to specify that the "eligibility demonstration may be reviewed by the permitting authority or by EPA to verify that the demonstration meets the requirements of Appendix A to this subpart and is technically sound..." U.S. EPA states in the preamble (70 FR 76923) that the discretion of each source is not unlimited because permitting agencies have the authority to review each site specific eligibility demonstration to determine if it meets the requirements in section 7(c) of Appendix A to the final rule and if the methodology, as applied in the demonstration of eligibility, is technically sound and appropriate. Sources may want to review alternate methodology with IDEM before use and submission to ensure its approvability, but doing so will not be required.

Comment: Some sources are working on a template fuel sampling and analysis plan that could be shared with IDEM for use in communication and outreach with other affected sources. (PU, CTE)

Response: IDEM will review all appropriate fuel sampling plans from sources using this compliance option. Should a source decide to use a template to develop a fuel sampling plan, the source will take responsibility in determining that the plan adequately fulfills the requirements of

the rule.

Comment: U.S. EPA has proposed changes to the fuel sampling and analysis methods referenced in the NESHAP (70 FR 62264, October 31, 2005). The timeline for final promulgation of this rule is unknown. (PU, CTE)

Response: If U.S. EPA finalizes this amendment in time for final adoption, IDEM will include the amendment in this state rule. However, U.S. EPA has indicated that this amendment would most likely not be finalized before June 2006.

Comment: IDEM should consider making additional changes to the methodology as requested by the American Society for Testing and Materials (ASTM) in their letter to the U.S. EPA dated February 16, 2005. ASTM, as the primary authority for most of the methods referenced in the NESHAP, is also the best candidate to identify alternatives to those methods selected by U.S. EPA staff for inclusion in the NESHAP. (PU, CTE)

Response: If U.S. EPA includes these additional ASTM test methods in a final rule amending the NESHAP before final adoption of the state rule, IDEM can incorporate these changes.

Comment: Some of the references in the draft language to “health based” are hyphenated and some are not. All such references should be hyphenated. (GE)

Response: The draft rule language no longer references “health based.”

Comment: In paragraph (c)(5)(B), the chemical formula for chlorine is “Cl₂”, not “CL₂”. (GE)

Response: 326 IAC 95-1(c)(5) has been deleted from the draft rule.

Comment: The agency should address the specific process by which emissions averaging plans, fuel sampling and analysis plans, and health-based compliance alternative plans will be reviewed and approved, particularly in regards to timing. It is the commenter’s interpretation that if any data collected to demonstrate compliance with the submitted plan is undertaken without explicit approval of IDEM it may be invalidated if the plan is disapproved after the data is collected. (PU, CTE)

Response: Sources opting to use the health-based compliance alternative assume inherent risk in this option. IDEM will follow the time allowed in the permitting process (one hundred twenty (120) days for a minor permit modification (MPM), two hundred seventy (270) days for a significant permit modification (SPM). IDEM encourages sources to submit any compliance plan early. IDEM will approve or disapprove a health-based compliance demonstration based on multiple factors, with (certifiable) data collected by the source among those factors. Should a demonstration contain valid, certifiable data, but another parameter or calculation is invalid, the data collected should remain valid.

Comment: IDEM should schedule a public meeting to discuss implementation of the NESHAP. The commenter recommends that the discussion include: 1) review and approval process of the various plans; 2) permit changes that must be made to the Title V operating permits to facilitate incorporation of the NESHAP rule language; and 3) permit changes that must be made to the Title V operating permits to facilitate incorporation of the parametric monitoring associated with pollution control equipment. (PU, CTE)

Comment: For sources that choose to pursue the health-based compliance alternative, the integration of the NESHAP requirements into the Title V permit is a key issue of concern. IDEM should hold a stakeholder meeting to discuss this issue and to receive industry input on the cost-benefit of the state-based changes. (CASE)

Response: IDEM will schedule a public meeting to discuss implementation and all commenters will be notified.